## Community Discussion

- Wednesday Evening (7 PM)
- Topics for discussion
  - Rebalancing PFC program to include PFC activities for ITER (refocusing ALPS effort)
  - Identification of interests and opportunities for US work on ITER PFC R&D

# Refocusing of ALPS/PFC

- Determine essential core ALPS activities
- Find out opportunities for collaboration on ITER
  - Tritium retention and removal
  - ELM mitigation
  - PFC scale-up and reliability
- What are our unique capabilities and overlap with ITER needs

# Refocusing of ALPS/PFC

- What is core program (all should not be on one topic) long range vision (maintain stability)
- Optimization of schedule relative to NSTX opportunity
- What are the needs of the domestic program?

# Refocusing of ALPS/PFC

- Can any scope be shifted to science program?
- Improved interactions in community and improved efficiencies
- PFC Steering committee membership (balance science and engineering)

- Tritium Retention and removal in carbon
- Recycling Control
- Wall Conditioning in SS machine
- Chemical Erosion understanding
- Erosion of first wall
- Smart tiles for diagnostics
- Core fueling/regime control

- SOL power flow and exhaust
- Melt layer stability (W, Be)
- Disruption mitigation effects on 1st wall
- ELM effects on pfc
- ELM tolerant divertor
- Carbon/wall material transport and redep
- Mantle and divertor radiation

- SOL transport (convection,....)
- Component fabrication (joining, reliability,...)
- PFC Engineering diagnostics (flow, temp,...)
- Active wall coatings
- Helium/DT pumping
- Disruption forces

- Diagnostic integration with PFC
- Reliability
- SOL physics
- Ancillary equipment HHF/erosion testing
- Radiation transport in SOL/divertor
- Ergodic limiter
- Atomic physics data

- Thermomechanical modeling fatigue, etc.
- In-situ repair
- Remote maintenance
- Installation accuracy, erosion monitor,...
- Fast particle damage (alpha, runaway electron)
- Neutron damage